

Notice of RCRA Permit Modification  
in Accordance with 20 NMAC 4.1.900  
(40 CFR Part 270)

Waste Isolation Pilot Plant  
Carlsbad, New Mexico

November 30, 1999

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Consistent with requirements of 20 New Mexico Administrative Code (NMAC) 4.1.900 (hereafter referred to as Part 270 or Section 270.XX) the U.S. Department of Energy, Carlsbad Area Office is submitting to the New Mexico Environment Department (NMED) a notice of Class 1 modifications to the Hazardous Waste Facility Permit (#NM4890139088-TSDF) for the Waste Isolation Pilot Plant (WIPP). Specifically, this information is provided to comply with the requirements of Section 270.42(a)(i).

Modifications are listed in Table 1. Listed information includes a reference to the applicable section of the permit, a brief description of the item, and the class of the item, as identified in Appendix I to Section 270.42. The relevant permit modification category, as also identified in Appendix I, is provided as well. More complete descriptions of the class 1 modifications are provided in Attachment 1.

All of the identified changes are minor in nature and serve to keep the permit current with facility operations. The changes do not substantially alter the permit conditions or reduce the capacity of the facility to protect human health or the environment and the modified permit is no less stringent than the current permit. This submittal does not contain class 1 modifications requiring approval prior to implementation.

**Table 1. Class 1 Hazardous Waste Facility Permit Modification**

<b>No.</b>	<b>Affected Permit Section</b>	<b>Item</b>	<b>Category</b>	<b>Attachment 1 Page #</b>
1	B3	Replace the requirement that controlled changes to WAP related procedures be addressed as part of the nonconformance and corrective action process and reported to NMED with a requirement to utilize the document control processes of the Quality Assurance Program Document to control changes to those procedures and add an equivalent reporting requirement.	A.1	A-1
2	B3	Modify Table B3-8 PRDL and PRQL footnotes to correct typographical errors.	A.2	A-2
3	B3	Modify Table B3-10 to require training and qualification requirements of site-specific and on-the-job training with a 2-year requalification for FTIRS operators and technical supervisors.	B.5.b	A-3
4	B6	Modify the Table B6-2 to make it consistent with the requirements in Section B1-4 for sample tags and labels.	A.1	A-5
5	D1	Modify Attachment D1 to incorporate updated Preoperational Underground TRU Mixed Waste Disposal Area Inspection form.	A.1	A-6
6	F-2 H	Modify text to reflect current organizational structure.	A.1	A-10

## **Attachment 1**

### **Descriptions of the Hazardous Waste Facility Permit Modification**

## Item - 1

### Description:

Replace the requirement in Section B3-13 that controlled changes to WAP related procedures be addressed as part of the nonconformance and corrective action process and reported to NMED with a requirement to utilize the document control processes of the Quality Assurance Program Document to control changes to those procedures and add an equivalent reporting requirement.

### Basis:

This item replaces the use of the nonconformance and corrective action processes, which were not designed to control changes to documents, with equivalent procedures that were designed to control such changes. EPA staff has objected to the use of the nonconformance and corrective action processes being used for document control because the processes, which have specific meanings in ASME/NQA-1, are not appropriate for controlling changes to documents. The use of the nonconformance and corrective action procedures to control changes to documents would be confusing and could unnecessarily increase the risk of a QA program failure.

### Discussion:

The item above is a Class 1 permit modification under Section 270.42, Appendix I, A.1. This change to the permit is most appropriately classified as an administrative and informational change. The item neither substantially alters the permit conditions nor reduces the capacity of the facility to protect the human health and the environment.

### Revised Permit Text:

Section B3-13, Page B3-33, lines 12 and 13

~~Controlled changes to WAP-related plans or procedures will be addressed as part of the nonconformance and corrective action process.~~

A. Insert the following new Section to Attachment B3:

### Section B3-15 - Changes to WAP Related Plans or Procedures

Controlled changes to WAP related plans or procedures shall be managed through the document control process described in the Quality Assurance Program Document (QAPD). The Site Project Manager and the Site Project Quality Assurance Official shall review all non-administrative changes and evaluate whether those changes could impact data quality objectives specified in the permit. After site certification, any changes to WAP related plans or procedures that could positively or negatively impact data quality objectives (i. e., those changes that require prior approval of the Permittees as defined in Section B5-2) shall be reported to the Permittees within five (5) days of

identification by the Project Level review. The Permittees shall send NMED a monthly summary briefly describing the changes to plans and procedures identified pursuant to this section during the previous month.

B. Change the number of existing Section B3-15 to B3-16

B3-156 List of References

C. Add the new section to the Table of Contents

#### ATTACHMENT B3

#### QUALITY ASSURANCE OBJECTIVES AND DATA VALIDATION TECHNIQUES FOR WASTE CHARACTERIZATION SAMPLING AND ANALYTICAL METHODS

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## Item - 2

### Description:

Modify footnote definitions for the PRDL and PRQL at the bottom of Table B3-8 to correct the following typographical errors. The PRDL should be reported in units of micrograms per liter, not milligrams per liter. Micrograms per liter is consistent with what is shown in the header row of Table B3-8. PRQLs are to be reported in milligrams **per** kilogram instead of milligrams **pre** kilogram.

### Basis:

This change corrects two typographical errors.

### Discussion:

The item above is a Class 1 permit modification under Section 270.42, Appendix I, A.2. This change to the permit is most appropriately classified as correction of typographical errors. The item neither substantially alters the permit conditions nor reduces the capacity of the facility to protect the human health and the environment.

### Revised Permit Text:

Table B3-8, page B3-48, footnotes

PRDL = Program required detection limit (i.e., maximum permissible value for IDL)  
(~~milligrams~~ **micrograms** per liter)

PRQL = Program required quantitation limit (milligrams ~~pre~~ **per** kilogram)

### Item - 3

**Description:**

Modify Table B3-10 to require training and qualification requirements of site-specific and on-the-job training with a 2-year requalification for FTIRS operators and technical supervisors.

**Basis:**

The training and qualification requirements for FTIRS operators and technical supervisors were not included in Table B3-10.

**Discussion:**

The item above is a Class 1 permit modification under Section 270.42, Appendix I, B.5.b. This change, classified as an *other change* to the training plan establishes additional training requirements that were not in the final permit. These training and qualification requirements are necessary for laboratory personnel performing waste characterization. The final permit omitted the training and qualification requirements for FTIRS operators and FTIRS technical supervisors. A FTIRS system is a specialized piece of equipment that is used for headspace gas sampling and analysis in accordance with the requirements of the permit. The FTIRS system does not require that the operator make data interpretations during operation, but does require that the operator be familiar with the specifics of operating the equipment in the prescribed configuration. Therefore, FTIRS operators and technical supervisors are required to successfully complete site-specific and on-the-job training with a 2-year requalification.

### Item 3 (continued)

#### Revised Permit Text:

TABLE B3-10  
MINIMUM TRAINING AND QUALIFICATIONS REQUIREMENTS<sup>a</sup>

Personnel	Requirements <sup>a</sup>
Radiography Operators <sup>c</sup>	Site-specific training based on waste matrix codes and waste material parameters; requalification every 2 years
FTIRS Technical Supervisors <sup>b</sup> FTIRS Operators <sup>c</sup>	Site-specific and on-the-job training based on the site-specific FTIRS system; requalification every 2 years
Gas Chromatography Technical Supervisors <sup>b</sup> Gas Chromatography Operators <sup>c</sup>	B.S. or equivalent experience and 6 months previous applicable experience
Gas Chromatography/Mass Spectrometry Operators <sup>c</sup> Mass Spectrometry Operators <sup>c</sup>	B.S. or equivalent experience and 1 year independent spectral interpretation or demonstrated expertise
Gas Chromatography/Mass Spectrometry Technical Supervisors <sup>b</sup> Mass Spectrometry Technical Supervisors <sup>b</sup> Atomic Absorption Spectroscopy Technical Supervisors <sup>b</sup> Atomic Absorption Spectroscopy Operators <sup>c</sup> Atomic Mass Spectrometry Operators <sup>c</sup> Atomic Emission Spectroscopy Operators <sup>c</sup>	B.S. or equivalent experience and 1 year applicable experience
Atomic Mass Spectrometry Technical Supervisors <sup>b</sup>	B.S. and specialized training in Atomic Mass Spectrometry and 2 years applicable experience
Atomic Emission Spectroscopy Technical Supervisors <sup>b</sup>	B.S. and specialized training in Atomic Emission Spectroscopy and 2 years applicable experience.

<sup>a</sup> Based on requirements contained in *USEPA Contract Laboratory Program Statement of Work for Organics Analysis* (Document Number OLM 01.0) and *Statement of Work for Inorganics Analysis* (Document Number ILM 03.0).

<sup>b</sup> Technical Supervisors are those persons responsible for the overall technical operation and development of a specific laboratory technique. QAPjPs shall include the site-specific title for this position.

<sup>c</sup> Operators are those persons responsible for the actual operation of analytical equipment. QAPjPs shall include the site-specific title for this position.

## Item - 4

### Description:

Modify the Table B6-2 to make it consistent with the requirements in Section B1-4 for sample tags and labels.

### Basis:

The evaluation criteria in the B6 audit checklist are different from the criteria specified in Section B1-4. To eliminate confusion on the part of the audit team, this checklist item should be changed to reflect the exact requirements from Section B1-4 for sample tags/labels.

### Discussion:

The item above is a Class 1 permit modification under Section 270.42, Appendix I, A.1. This item is most appropriately classified as an administrative and informational change. The modification neither substantially alter the permits conditions or reduce the capacity of the facility to protect human health or the environment.

### Revised Permit Text:

Page B6-50, Table B6-2

Do sample tags or labels contain the following information:

- ~~\_\_\_\_\_ C \_\_\_\_\_ Sample Description adequately describe sample location and appearance~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ Ambient temperature and pressure~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ Laboratory identification number~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ Analyses requested~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ Date/Time sampled~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ QC Designation~~
- ~~\_\_\_\_\_ C \_\_\_\_\_ Sampler's initials and organization~~
- C        Sample ID number
- C        Sampler initials and organization
- C        Ambient temperature and pressure (for gas samples only)
- C        Sample description
- C        Requested analyses
- C        Data and time of collection
- C        QC designation (if applicable)

(Section B1-4)

## **Item - 5**

### **Description:**

Modify Attachment D1 to contain the updated inspection form for the Preoperational Underground TRU Mixed Waste Disposal Area (WP 05-WH1810, Rev. 4).

### **Basis:**

This revision is necessary to assure that the proper room ventilation rate information is documented during the preoperational underground TRU Mixed Waste Disposal Area inspection with regard to: 1) room ventilation requirements contained in permit Section M2, and 2) information provided in the WIPP's Mine Ventilation Rate Monitoring Plan, to be included as Attachment Q of the permit.

### **Discussion:**

The item above is a Class 1 permit modification under Section 270.42, Appendix I, A.1. This item is most appropriately classified as an administrative and informational change. The modification neither substantially alters the permit's conditions or reduce the capacity of the facility to protect human health or the environment.

### **Revised Permit Text:**

See page A-7.

## Attachment 1 Preoperational Underground TRU Mixed Waste Disposal Area Inspections

PREOPERATIONAL U/G TRU MIXED WASTE DISPOSAL AREA INSPECTION								
	DATE							
	TIME							
U/G Work Area Ground Control Inspection satisfactory in accordance with WP 04-AU1007	%/U*							
<u>Room ventilation rate (minimum 35,000 scfm)</u>	<u>Rate (scfm)</u>							
No evidence of adverse health/safety conditions	%/U*							
Unobstructed access to exposed face of emplaced containers	%/U*							
Area free of debris	%/U*							
No evidence of spills/leaks from containers	%/U*							
Adjacent mine pager phones operational	%/U*							
U/G phone system operational	%/U*							
Warning signs posted	%/U*							
PERFORMER INITIALS	xxxxx x							
WHE INITIALS	xxxxx x							

\* % = Satisfactory U = Unsatisfactory N/A = Not Inspected

Performers enter printed name, signature, date, and initials

_____	_____	_____	_____
_____	_____	_____	_____

Printed Name	Signature	Date	Initials
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REMARKS: \_\_\_\_\_

\_\_\_\_\_

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VALIDATION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

WHE (Print Name) Signature Date

## Item - 6

### Description:

- A. Modify text in Section F-2 to refer generically to Permittee organizations that may provide support to the EOC team.
- B. Modify text in Figure H-1 to add blocks beneath the block of General Manager showing National TRU Programs and Shipping Coordination. A number "4" should be placed beneath Shipping Coordination to indicate that the WWIS Data Administrator now reports to the Shipping Coordinator. Under the existing box for Waste Operations revise "1-5" to read "1-3, and 5"

### Basis:

These revisions are necessary to make the permit consistent with the Operating Contractor's current organizational structure.

### Discussion:

The items above are Class 1 permit modifications under Section 270.42, Appendix I, A.1. These items are most appropriately classified as an administrative and informational change. The modification neither substantially alters the permit's conditions or reduce the capacity of the facility to protect human health or the environment.

### Revised Permit Text:

- A. Section F-2, page F-9, lines 35-37

The EOC staff can also include technical and logistic support personnel from **other Permittee** ~~WID Engineering, WID Public Affairs, WID ES&H, WID Operations,~~ **organizations and DOE, as necessary.**

B. Figure H-1, page H-13

Add the following boxes and a reference number to indicate the relationship between the National TRU Programs and Shipping Coordination organizations and the WID General Manager, Also revise the numbers beneath the Waste Operations Department to indicate the correct organization to which the WWIS Data Administrator reports.

